

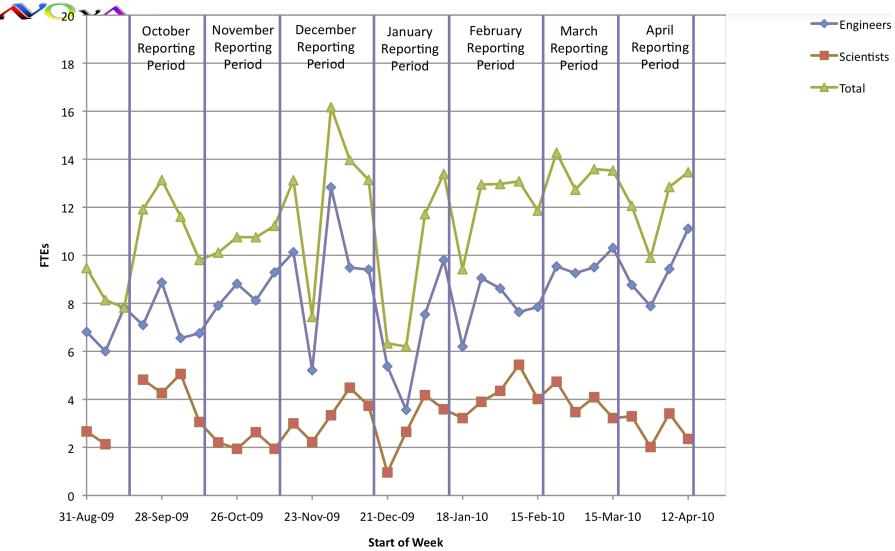
Accelerator & NuMI Upgrade Resource Update

Paul Derwent

27 April 2010



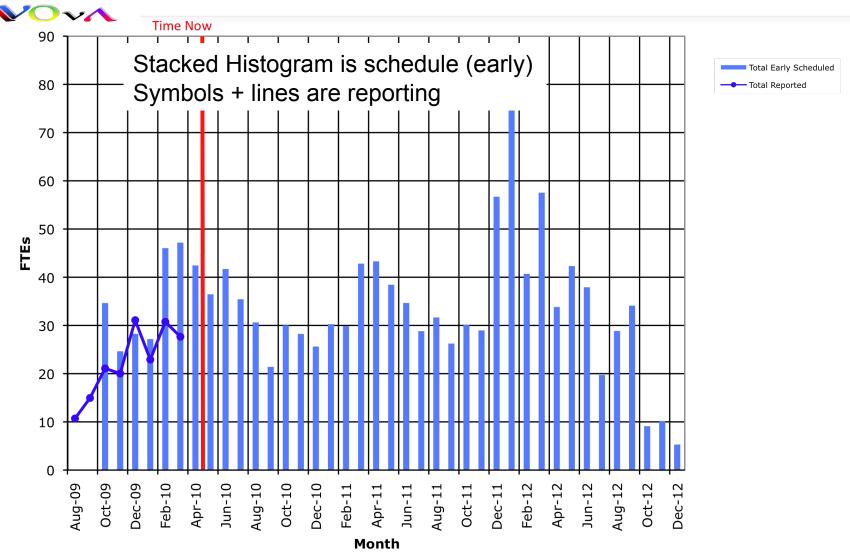
Engineers & Scientists FTE by week



FTE := 34 hours/week



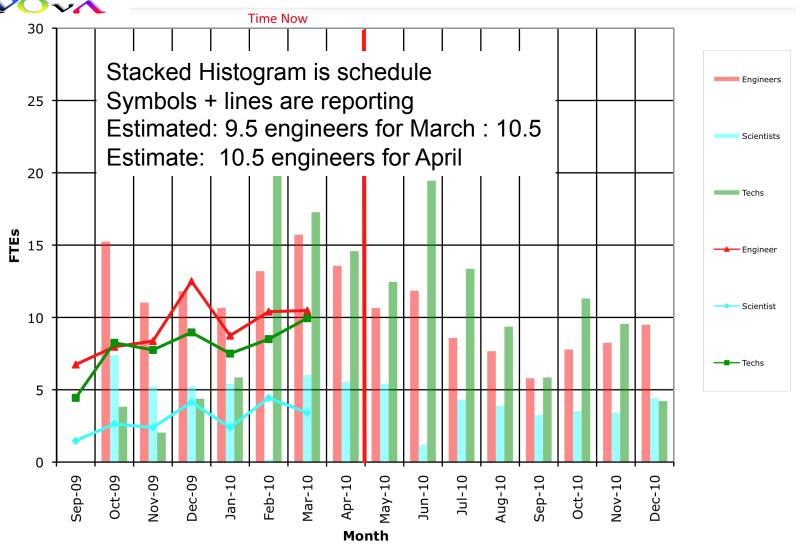
ANU Resource Requirements



FTE := 147.3 hours/month



ANU Resource Requirements

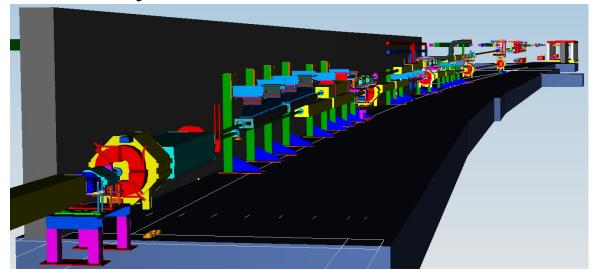


FTE := 147.3 hours/month



Technical Progress

- Installation planning: 3d model of injection line
 - Stands coming along
 - PDS magnet PO issued



- Good progress on target chase cooling:
 - Stripline cooling, forced air cooling
- Parts for MI Inj prototype magnet, PS, pulser coming in
- Accord with IHEP on baffle/target design & construction
 - 3 baffles to be delivered by Feb 2011: early but confident in design
 - Target design to be complete this fall



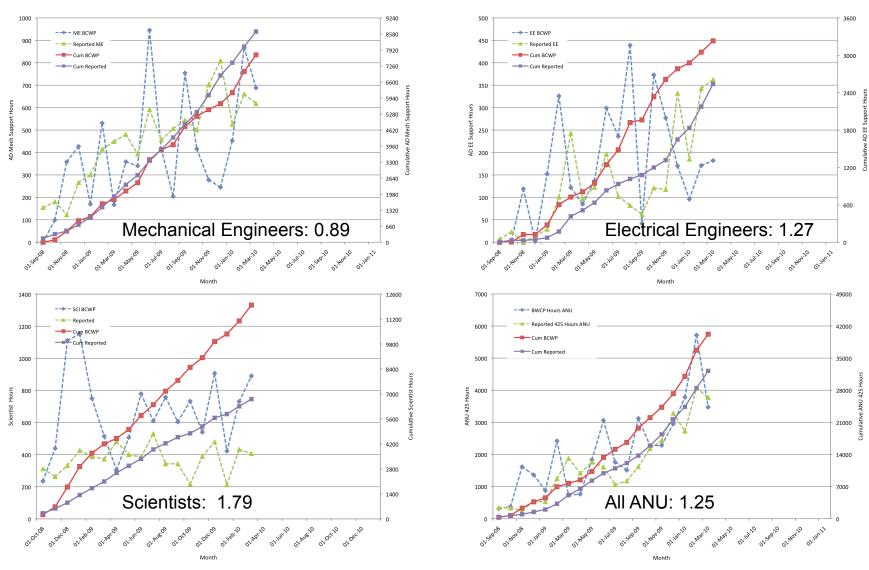
Technical comments

- PFL frames & kicker load resistor parts
 - PO's placed, delivery slower than expected
 - Have techs available to do the fabrication but don't have the parts!
- Update the Tev Re-use list:
 - Adding TeV BPM echoteks (the pbar capabilities of the system)
 - 60 of the 140 in the TeV
 - Adding VME processors
 - 12 of the 24 in the TeV
- Engineering for RR 53 MHz
 - Increasing (mechanical)
 - RF Engineer assignment made and getting going





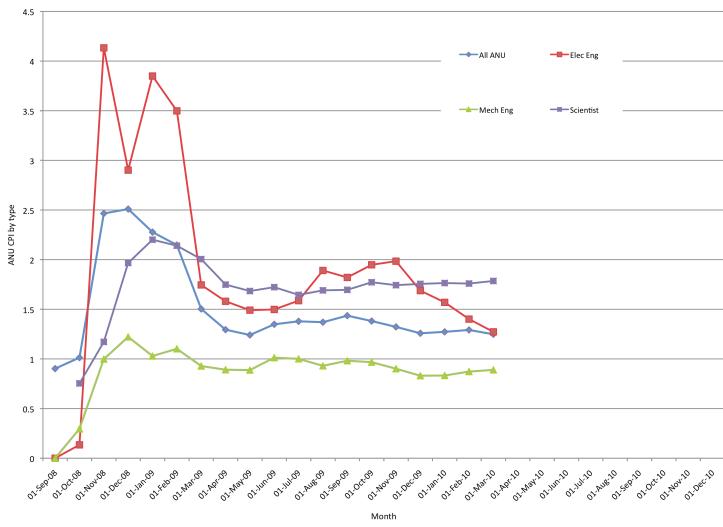
Resource Productivity





Labor CPI

• 1.25 (hours), 1.16 (\$) through March



27 Apr 2010

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Milestones

• Accomplished: reported at last PMG

| 1.0 ANU F | Planning, Engineering & Design | Time Now - 01Apr10 | | | |
|-------------|--|--------------------|---------|-----|-----------------------|
| 1.0.1.1.6.3 | RR 53 Mhz RF Design Review Complete | 01Mar10 | 28Jan10 | L.5 | ▼ ☆ -22d |
| 1.0.3.2.5.1 | NuMl Target, Baffle & Carrier Initial Design Review Complete | 15Mar10 | 19Apr10 | L.4 | ☆ 25d ▼ |

- Missed: with projected finish dates
 - not impacting critical path
 - Following up to keep in front of problems

| 1.0 ANU P | lanning, Engineering & Design | Time N | ow - 01Apr10 | | | | | |
|--------------|---|---------|--------------|-----|----------|------------|--------------|--|
| 1.0.3.2.5.9 | NuMI Hadron Monitor Initial Re-design Complete | 22Jun10 | 06Mar09 | L.5 | V | on on prio | <u> </u> | |
| 1.0.3.1.5.3 | NuMI Profile Monitor Technical Design Review Complete | 25Jun10 | 19Feb10 | L.5 | | V | <u> </u> | |
| 1.0.3.3.5.3 | NuMI Target Chase Cooling Design Complete | 14Apr10 | 02Mar10 | L.5 | | | <u></u> -31d | |
| 1.0.1.1.6.5 | RR Beamline Modifications Design Review Complete | 16Jun10 | 08Mar10 | L.5 | | | <u> </u> | |
| 2.0 ANU C | onstruction | | | | | | | |
| 2.0.4.4.3.8 | RR Inj & GC Install 3 Spare PFL Frames in MI-39 | 01Apr10 | 08Apr09 | L.5 | V | | | |
| 2.0.4.4.3.11 | RR Inj GC Bumper PS Design Review | 23Jul10 | 22May09 | L.5 | V | | <u> </u> | |
| 2.0.4.4.1.2 | Off Project: Gap Clearing Kicker System Ready for Installation | 01Apr10 | 01Mar10 | L.5 | | ▼ ∠ | 23d | |

27 Apr 2010



Summary

- Resources being tracked
 - Labor CPI remains positive: 1.16 (\$), 1.25 (hours) through 'March'
 - Resolve/understand conflicts (operations, LBNE) before they arise
- Scheduled ready for shutdown:
 - 21 Dec 2011: slipped two weeks since last Month (6 Dec 2011)
 - RR 53 MHz RF fabrication task critical path
 - 44 days of float to 1 Mar 2012 (55 days last month)